

## Evaluation of Relationship between Job Stress Dimensions with Occupational Accidents in Industrial Factories in Southwest of Iran

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**Abstract :** Background: Stress in the workplace today is one of the most important public health concerns and a serious threat to the health of the workforce worldwide. Occupational stress can cause occupational events and reduce quality of life. As a result, it has a very undesirable impact on the performance of organizations, companies, and their human resources. This study aimed to evaluate the relationship between job stress dimensions and occupational accidents in industrial factories in Southwest Iran. Materials and Methods: This cross-sectional study was conducted among 200 workers in the summer of 2023 in the Southwest of Iran. To select participants, we used a convenience sampling method. The research tools in this study were the Health and Safety Executive (HSE) stress questionnaire with 35 questions and 7 dimensions and demographic information. A high score on this questionnaire indicates that there is low job stress and pressure. All workers completed the informed consent form. Univariate analysis was performed using chi-square and T-test. Multiple regression analysis was used to estimate the odds ratios (OR) and 95% confidence interval (CI) for the association of stress-related factors with job accidents in participants. Stata 14.0 software was used for analysis. Results: The mean age of the participants was 39.81(6.36) years. The prevalence of job accidents was 28.0% (95%CI: 21.0, 34.0). Based on the results of the multiple logistic regression with the adjustment of the effect of the confounding variables, one increase in the score of the demand dimension had a protective impact on the risk of job accidents(aOR=0.91,95%CI:0.85-0.95). Additionally, an increase in one of the scores of the managerial support (aOR=0.89, 95% CI: 0.83-0.95) and peer support (aOR=0.76, 95%CI: 0.67-87) dimensions was associated with a lower number of job accidents. Among dimensions, an increase in the score of relationship (aOR=0.89, 95%CI: 0.80-0.98) and change (aOR=0.86, 95%CI: 0.74-0.96) reduced the odds of the accident's occurrence among the workers by 11% and 16%, respectively. However, there was no significant association between role and control dimensions and the job accident ( $p>0.05$ ). Conclusions: The results show that the prevalence of job accidents was alarmingly high. Our results suggested that an increase in scores of dimensions HSE questioners is significantly associated with a decrease the accident occurrence in the workplace. Therefore, planning to address stressful factors in the workplace seems necessary to prevent occupational accidents.

**Keywords :** HSE, Iran, job stress occupational accident, safety, occupational health

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